(APPROVED: 05/02/16)

HANA ADVISORY COMMITTEE TO THE MAUI PLANNING COMMISSION MEETING OF SEPTEMBER 14, 2015

* All documents, including written testimony, that was submitted for or at this meeting are filed in the minutes file and are available for public viewing at the Maui County Department of Planning, 2200 Main St., Suite 315, Wailuku, Maui, Hawai`i. **

A. CALL TO ORDER

The meeting of the Hana Advisory Committee (Committee) was called to order by Chairperson, Ward Mardfin, at approximately 4:10 p.m., Monday, September 14, 2015, at the Old Hana School Cafeteria, 5091 Uakea Road, Hana, Island of Maui.

A quorum of the Committee was present (see Record of Attendance).

Chair Ward Mardfin: . . . 4:10 and -- it is 4:10 and the meeting is called -- hereby called to order. Present are -- is myself, Ward Mardfin; John Blumer-Buell; Scott Crawford; Anjoleen Hoopai-Waikoloa. So four people make this a quorum. Also with us is Clayton Yoshida, from the Department of Planning; Ryan Quigless is a new planner with the Department of Planning; Jennifer Oana is my Corporation Counsel, who's going to make sure I try to do everything as legally as I possibly can; and Suzie Esmeralda and our loyal and faithful secretary. We have other people here and, Charlene, do you want to introduce them? This is Charlene Shibuya, and she's with Munekiyo & Hiraga, they're the consultants for our first item.

Ms. Charlene Shibuya: Thank you, Chair, Ward Mardfin, and, you know, I guess I really gotta thank you guys for doing a special meeting for our group because you know that Monday was predicted to be pretty nasty, but I guess it wasn't as bad as the predictions on Friday, but thank you anyway. But with me today to present the third round of, and third and final round, of this presentation on preparing this preservation plan, I have Cody Aihara, she's the structural engineer from Nagamine Okawa Engineers, and then we have Alison Chiu, Tonia Moy, and Virginia Murison, they are all architectural historians, I don't know if I got you guys, specialists that's from Fung Associates, Inc., and then they're here to present, you know, what sort of went on in the past two rounds, you guys were involved with the second round, and, Ward, thank you for giving us a lot of, you know, meaningful input, and he actually checked a lot of our work, so without further ado, I'll present it -- I'll turn it over to Tonia, who will open up the presentation.

B. PUBLIC TESTIMONY

Chair Mardfin: Let -- because you do that, everybody's been introduced, is there any public testimony? Seeing none, we will proceed with Communications, item C.1., which is Charlene Shibuya, so now you can take it away, please.

C. COMMUNICATIONS

1. MS. CHARLENE SHIBUYA, of MUNEKIYO HIRAGA, consultant for the STATE DEPARTMENT OF TRANSPORTATION, requesting comments on the Hana Highway. Route 360, Bridge Preservation Plan within the Hana Highway Historic District, Federal Aid Project No. BR-0360 (012) - Pre-Final Draft. (This matter was previously scheduled for the Committee's August 31 meeting but had to be rescheduled due to consultant team's inability to make the trip to Hana for an August 31 meeting based on projected impacts to the area from Hurricane Ignacio based on August 25, 2015 storm tracking projections.) (Committee Members: Please bring your documents.)

The Committee may provide its comments on the draft.

Ms. Shibuya: I'm not going to take it away again though --

Chair Mardfin: I had to have public comments.

Ms. Shibuya: Yeah, so, yeah, my name is Charlene Shibuya and I'm going to turn it over to Tonia to do the presentation.

Ms. Tonia Moy: Good afternoon, and thank you so much for coming again. So sorry we didn't come that two Mondays ago. There was that tropical storm threatening, and I think someone had sent us video of water going over the bridges, like the week before, so we were all a little paranoid and we said we -- and so we were just, you know, like really concerned and especially with all that water coming over and -- and we said that we actually saved Hana from a storm because if we had showed up, there would have probably been a storm so anyway.

Unidentified Speaker: ...(inaudible - not speaking into the microphone)...

Ms. Moy: Yeah, that's right. Exactly right. So like Charlene said, we're in our third round. We've been to different various community meetings throughout Hana, we've been to the CRC, the Cultural Resources Commission, three times, we've met with the State Historic Preservation Division a few times, so anyway, this is our third round. And just as a reminder, this is -- our client is the State Department of Transportation, so you know, as you guys all know, they always have -- every time they do work on Hana Highway or on any historic bridge, they go through this whole historic preservation review process, so this project is trying to be like the first step for them in identifying what, you know, what can be changed, and all that, along Hana Highway to make their future projects easier. So then the prime consultant is the structural engineers, which is Cody who represents them, and we are the architectural preservation specialists, we try to make sure that the bridges and

the whole highway keep its historic character, that's sort of our role. We also had traffic and civil engineers, and they were kinda there to make sure that the roadway doesn't get too -- the civil part, that there's not like any dips and weird geometry forming by what our proposals are being done, and they also did a little traffic study. And then we have electrical engineers, their part was small. They just went along the highway checking to make sure there wasn't anything really major that would affect any bridge project, and, you know, they found a few bridges that would need some moving of some wires, but just temporarily and it would always be put back, so there was no big issues with the electrical. And of course, Charlene, from Munekiyo, and they helped us, you know, reach out, they helped us do these community meetings, like told us, you know, which communities we should meet with and, you know, helped organize it. Thank you, Charlene, that was a big job. And then we also had an archaeological company, Cultural Surveys Hawaii. We had Tanya Lee-Greig, I don't know if you folks know her, but she kind of did a literature search mostly to find out if there's anything really big that would stop or that would really hinder any project, like if we wanted to widen something, if there was some really key archaeological or cultural site that would, you know, prohibit any widening or any of that.

So the overall project purpose was a preservation plan. You know, DOT hired us to do a preservation plan, not a demolition plan, not, you know, a straightening big highway plan, so that's basically what we are trying to do and we tried to utilize like context sensitive design, trying to make sure that it fits in the context of Hana Highway. And then also, as a note, that this isn't -- I think we told you folks before but I don't know if there's anybody new here, but this isn't a construction project. So whatever's in there is just design guidelines like, so that every time there's a new -- there is a construction project, and DOT has said like this is going to take, what, 40, 50 years to actually do all the bridges, if they even get to doing all the bridges, they're going to try and repair as much as possible, but this is like the, you know, if they do have to rehabilitate, then this is the plan that they want to use. But when there is a construction project, then they'll have to come back again but -- to the community.

So like the purpose of this meeting is, you know, we want to review our current progress and present the bridge treatment, you know, what our proposed treatment is for each bridge, and, you know that'll be Alison and Cody will more talk about the treatment of it, and then Virginia will talk about how we got to some of our -- what are kind of our thought processes were, like why we chose certain bridges to do certain things to, and then we, of course, we really want everybody's community feedback, and it's been -- it's been really interesting, you know, getting community feedback 'cause mostly, of course, everybody wants it to stay one lane, and that's been general, and then there's been a lot of feedback on the like even if we make 40 tons, to post it at 10 tons, and, you know, all kinds of other ways to kind of maintain the kind of more isolation, I guess, so -- so, yeah, so that's -- our first round of meetings, which was last year, we went, you know, we went to about five different communities, and then we tried to gather what they wanted, and that's where they

told us, right, like I don't think there was a single person who said you should make all the bridges two lanes, you should make it straighter, wider. I can't think of a single person who said that, not even the tour company so -- and then the next one, we did some concepts, and we brought it forth. I know that we came to you guys, and we're sorry, I think they were going to close the -- they were going to close the road that day so everybody -- and then there was another issue, I think, that took up about -- quite a bit of time, and then, anyway, so sorry about that, but we were -- but, Ward, thank you. You did follow through by giving us written comments, which is really helpful. And then this is our third one, which we are bringing back some of the comments that were got from the first round.

So I won't -- since most of you are probably familiar, I don't think I'm going to go through this area step-by-step because this just, you know, makes sure you know that it's the Hana Road, and that where it begins, and that it's only state bridges. That's another thing we should make clear, it's only the state bridges. The county has done another preservation plan a while back so -- and this is just a visual that shows you the state, and this is the county, which is not included in this plan. Just a little closeup so you can see all the numbers. So this is in your guys' handout so you can -- you can look at it closely. And this is just a list of all the bridges so, again, you can look at this closely.

We've had a lot of feedback on the names of bridges, and so I think what we're ending up doing is we will be doing a programmatic agreement based on this project, based on the preservation plan with the State Historic Preservation Division, FHWA, it'll be -- hopefully, it'll be like State Historic Preservation Division wants to follow this plan, but one of the items that we're going to be putting in the PA or we're going to be following through on the PA is that we are -- we're going to hire a -- like a Hawaiian -- well, I don't know if you guys know Kepa Maly, 'cause he apparently has done a lot of research already in this area names, so he will help us sort of like narrow down the names for the programmatic agreement. So the -- a specific project objective was to --

Chair Mardfin: Excuse me? Excuse me a moment?

Ms. Moy: Sure.

Chair Mardfin: When is he going to be doing this?

Ms. Moy: So he will be doing it sometime within the next year. We're going to be working on a programmatic agreement based on this, and then so probably we don't -- you know, he's agreed to do it.

Chair Mardfin: He's a wonderful man, but will he be in touch with us before he finishes up?

Ms. Moy: Oh, yeah, yeah. Well, the programmatic agreement will be -- it's a legal-binding document, so after it -- 'cause this is a report, so it's not really a legal-binding document, so after this report, you know, DOT and State Historic Preservation Division really want to make it into something more legally binding, which is a programmatic agreement, and in the programmatic agreement, you guys will be invited to be participants in it, so you guys, Hana community, you know --

Chair Mardfin: Okay. Thank you.

Ms. Moy: A whole bunch. CRC. So anyway, and then of course we have to consider its safety issues so we had to not only document its historic character and try and protect its historic character, but we have to take the safety into consideration, and then, of course, we were doing these community meetings, and then we prepared the recommendations, which is the report, the report, which I'm sure everybody's read all 1700 pages - no. And so, like just to give you an overview on how to use the report to maybe make it a little easier, so Section 1 is just the regulatory information, like what laws, you know, that the DOT has to follow, FHWA had to follow, State Historic Preservation Division has to follow. What's the regulatory background for it. So I'm sure that's the real interesting thing for most people but -- and then the next chapter, so that's Chapter 1 and 2, Chapter 3 is we did a summary of the guidelines and evaluation methods, like we followed -- say, we followed the Secretary of Interior Standards for the historic portion, structural had to follow other kinds of standards, DOT standards, the guidelines, so this one just goes through what standards we followed. And then we developed -- this is the design standards and guidelines we developed from those regulations, so you can -- this one is a very good chapter to review so you know what we were thinking when we got through each bridge. And then so Chapter 6 was we made a related issues because every meeting we went to, the biggest topic was traffic, you know, it was like how to get the tourists to pull on the side, I mean that was the very biggest topic so, which is not really a bridge, per se, issue, but it is a very important issue, it's very important to the community, so we did another issue -related issues, which we kinda gathered so that people would know that they're not forgotten and that it is in there so maybe it can be something that's brought up at another -for another project or it could be part of the PA, some of the items may be part of the programmatic agreement as well. And so Chapter 7 is a very interesting chapter 'cause it's kind of the history of it, it gives you like a lot of the background information of Hana Highway and when it was built and -- so that's a very interesting -- so if you're interested in history, that's a good chapter. And then the last, actually the huge sections of it is that, each bridge, we did an individual section for each bridge which gives recommendations on how, you know, how to treat the abutment, how to treat the wing wall, how to treat the -- so each individual bridge has its own section so that a designer in the future, the construction, actual construction project can come and take their chapter and pretty much have a good guideline on how they should treat the -- each bridge.

So now, I'm going to turn it over to Virginia, and Virginia's going to kind of give you a reason the how we sort of came up with these different bridges.

Ms. Shibuya: ...(inaudible)... I wanted to just interject a little bit between, you know, Tonia and Virginia. Just to give you an idea of all the community outreach, you know, we reached out to the various community associations, the Hana Lani, and I wanted to handout, you know, like a summary that's not in the draft plan yet, it only had the first round, at least to give you an idea of what kind of concerns and questions came up, you know, such as the bridge unrelated stuff, like the tourists, you know, holding them back, so if you don't mind, while Virginia's doing the presentation, I'm just going to hand out these things.

Ms. Virginia Murison: Hello. As we started looking into the bridges and getting -- digging into each individual bridge, we realized that they are indeed very individual, and we also realized that we couldn't just categorize them as open picket and closed picket, or solid and spanning, so what we did is we identified 17 bridges and 1 culvert which we felt were exceptional. They're exceptional because of historic date panel feature, they're the best example of its type, they contain unique features, and we felt that those bridges would merit a little bit of special consideration. The remaining 26 bridges and 11 culverts are what we call "contributing." Now, it's the same term that is used in the historic district nomination. In the historic district nomination, all of the bridges are contributing to the historic district, but we have raised 17 of them to an exceptional level. And just for another point of clarification, there are 12 historic culverts, which have been identified in the National Register nomination, and these are basically short bridges. When you drive over them, they look just like a bridge. They got the same railing types. They're just shorter. But by Federal Highways standards, if they span an opening or a railroad or whatever of less than 20 feet, they are defined as a culvert, not a bridge. Cody will be getting into some of the other culvert issues.

Also, as we address the bridges, we realized we were -- we were told and used some specific requirements, for example, that the minimum width of a one-lane bridge should be 16 feet, this allows for vehicles to pass in the rare circumstances of an emergency. There's the minimum height for the approach railings, the rock walls, and the guardrails is 27 inches. Now, in the case of our -- any work we're doing with historic parapets, we will be holding, as closely as we can, to the historic heights, not to the minimum 27-inch requirement. The railings and the --

Chair Mardfin: Excuse me, can interrupt you one second?

Ms. Murison: Yes.

Chair Mardfin: And ask a quick question?

Ms. Murison: Yes.

Chair Mardfin: You say you're going to go with 16 feet minimum. Already the bridge is less

than 16 feet.

Ms. Murison: Yes. The solid parapet bridges are less than 16 feet.

Chair Mardfin: Will you point them out when you get to them?

Ms. Murison: Yes.

Chair Mardfin: Thank you.

Ms. Murison: The guardrails and railings do need, over time, to be reinforced or protected to meet designated crash-test levels. Cody will be addressing that in more detail in the next section of the powerpoint. And, as been eluded to, the goal of DOT is to ultimately upgrade the bridges to a load limit of 40 tons even though they won't be posted for that, but this allows the larger emergency vehicles and other vehicles to traverse the highway without providing further damage.

We have -- we did then subdivide into open picket railings, and of those, there are 31 bridges and 5 culverts, the short bridges. Of these, we have 11 bridges which were designated exceptional, and they fall into a number of categories, which I will go over. All of the bridges meet, all the bridges with the open picket, meet or exceed the 16-foot width and, therefore, will not require widening. Four of culverts are narrower than 16 feet and will require some adjustment.

So have four curved bridges; in each case, the width exceeds the 16 feet by at least 3 feet, so the historic railings will be protected by an interior crash railing that allows the curve, the exterior appearance of the bridge to be maintained without any alteration. The interior crash rail that will be used or protecting some of the railings will be described in detail by Cody.

We do -- there are a couple of bridges, I know bridge no. 14, I'm sorry, I don't have the name, will be converted to a one-lane bridge from a two-lane bridge in order to avoid the widening, and it is in such a configuration that that will not pose a hazard, and in some of the cases, bridges that we are -- that are officially listed as two-lane in the highway listing, are actually being utilized and striped as one lane.

There are three arched bridges. As you know, one open span and two closed span, and the Waikane Stream Bridge is an exceptional single-span bridge for all the visible reasons. It is the last bridge that was constructed that connected the two halves of the Hana

Highway; it was the most challenging to get to and to construction. As a matter of fact, they even had an accident during construction a couple of weeks before the Hana Highway opened. These are all described in detail in Chapter 7. But the accomplishment of completing that bridge was quite an accomplishment. The Hanawi and Kuhiwa Bridges are the only two closed spandrel concrete arched bridges on Maui.

There are two distinctive pier bridges; one, on the left, has the amazing lava rock feature midstream -- mid-span that supports the bridge, and the other bridge rests on the oldest solid concrete pier wall on the Hana Highway. The pier actually predates the bridge by many years. It was installed to support a wood trestle bridge. Both of these bridges are just barely wider than 16 feet, so there will be a proposal to replace the railings with as close to -- a matching open picket railing as we could get, but that avoids other alterations and allows the bridge to not be widened.

Then we have the distinct railings. Here you have the Greek Crosses. Actually, this bridge was originally a narrower solid parapet bridge, it was widened in the 1930s, and the companion culvert, which is just on the Hana side of the bridge. Based on the historic drawings, we know they were originally a very narrow bridge and culvert. When they were remodeled in 1937, the highway department was quite interested in this Greek Cross railing profile, so this is the -- there are other examples, there's one on Maui for sure, there are other examples, but this is the only one on the Hana Highway and it makes it distinctive in that regard.

And the last open railing bridge of distinction or exception is the last bridge coming into Hana, which is the only Post World War II Bridge. It was constructed in 1947. The culverts, which were added to the right, the two bays on the rights, they were added in 1991. When the National Trust Nomination was done, that was actually considered a non-contributing feature to the structure and, therefore, this is technically the only non-contributing bridge on the Hana Highway, and we think maybe people would like to relook at that and consider it a contribution to the Hana Highway Historic District.

Then we have -- there are 20 contributing of the 31 open picket bridges that are contributing bridges. They're all 16 feet wide, as I've mentioned. The widest one can be unaltered with a protective rail on the inside. Those that are close to 16 feet in width will require the replacement of railing, again with a design that comes as close to matching this design as possible. And the charts that accompany this handout indicate which bridges and how many of them require what treatment.

Chair Mardfin: I'm sorry. Where did you say this -- where are they listed? The ones --

Ms. Murison: On this slide in your handout. This slide is slide no. 20. And then following that slide are two more slides of recommendations for the open picket. The first one, slide

21, being the recommendation for the exception bridges, broken down into types of recommendations, and slide no. 22 is the summary of recommendations for the contributing bridges, and then there's the overall consolidation of all the open picket bridges, so if you want to follow through on any of the numbers, that's -- they're here.

The second category of bridge by railing feature are the solid parapet bridges. Now these bridges were built -- these were the first bridges built on the Hana Highway. I'm sorry, let's put it this way: They're the first bridges designed on the Hana Highway. Several of them actually have drawings dating 1912, but they weren't even constructed till 1926, but they did follow those drawings. So at the time those were built, the goal was to get the highway done and it was, basically, a wagon road at that time, so they built it, most of the solid parapet bridges were originally slightly over 12 feet wide, which was apparently the going width for a wagon bridge, but it did allow the money to be spent to lengthen the road rather than widen the road; mostly, they were built between 1908 and 1914. In 1914, the open picket railing started to be in common use. I was told by someone, I believe at East Maui Irrigation, that the reason they went to the open picket was so that in the case of a flood or an overtopped stream, the water just went right through the railing rather than getting backed up at the railing. People have mentioned bridges to us that get overtopped during storms, so far we don't have a list of which ones they are. We do know that the Hana Highway was closed about three weeks ago for bridges at this end, but we still don't know the specifics. Of the solid parapet bridges, there are 12 solid parapet bridges and 7 culverts. Six of the bridges are considered exceptional. Of those, three of them have intact date panels, and you may or may not have taken the time to get out and actually see the date panels. Those are, again, considered exceptional because of the date panels. Those date panels will be preserved and because they're exceptionally narrow bridges, they will be widened to the upstream side in order to avoid altering the date panel.

Then Bridge no. 19 is what we call the "EMI Bridge" because it has all the equipment to raise and lower the sluice gate attached to the railing, the foundation is integrated into the dam, it is unique in so many ways, and it's 14.5 feet wide. This is a bridge we will be requesting an exception for width on because it would be hard to replicate any portion of this bridge and so we will be requesting a width exception and a test level of the railing exception because, again, the railing is not testable, but in order to make -- to assure the safety of that, the speed limit on that bridge will be lowered to five miles an hour.

Bridge no 40, built in 1908, it is the oldest bridge on Maui, and it's the third oldest bridge, concrete bridge in Hawaii. It's the first reinforced concrete bridge built on the Hana Highway, and the piers, again, like the other -- some of the prior bridge I showed you, the piers and you can kinda see where the end were built in 1906, originally, or for an earlier wooden bridge. It's the only triple-span solid parapet bridge on the Hana Highway, and it also features exceptional rock work on the abutments.

Bridge 21 is -- has the only stone pier on the Hana Highway. This -- the upstream parapet, which you see here, is intact, has its panel -- it does not have a date panel. The downstream parapet has been replaced. It's evident from just the configuration of it and the execution of it. This bridge will be widened on the downstream side replacing that non-historic parapet with a more appropriate parapet.

There are six contributing solid parapet bridges that, again, have contributing features to the Hana Highway. The bridge on the left, for example, the parapets are not original. The bridge on the right, the parapets have been very, very badly damaged. So work will be done on these six contributing bridges to bring them up to standards for the highway. Like with the open picket, there's a summary of recommendations for the solid picket. This is the chart. This would be on page 30. This would be the breakdown for the different treatments for the exceptional bridges, and page 31 would be the recommendations for the contributing bridges. And slide 32 is a wrap up of all of the recommendations for the solid parapet. So if you are curious about the different numbers and different treatments, they're represented there.

I will point out that in the introduction to the report, there is a brief summary page for each bridge which list some of its exceptional characteristics, and it is categorized by exceptional and contributing in the categories that we just went through, but then -- and then that one page summary is then heavily enhanced in the Section B and C where there's an entire chapter for each bridge. So with that, I'll turn it over to Alison.

Ms. Alison Chiu: Hi. Okay, so I'll talk a little bit about the team's treatment recommendations that are presented in the report. Tonia and Virginia both mentioned the bridge chapters, so there is actually a tailored recommendation for each individual bridge and culvert depending on its location and other things, other factors, such as, you know, adjacent utilities and the current roadway alignment, and the historic character defining features that Virginia just detailed for you.

So in looking at the railings, the team noted that the historic railings are often one of the most identifiable character defining features of the bridge, so retaining the historic parapets was very important to us and based on the feedback that we received from the community as well. Since these historic railings are not crash tested, one option that we were looking at is that it's necessary to add a crash-tested rail on the inside, which provides protection to the historic railing both in terms of, you know, damage or impact from automobiles and, you know, you see those scrapes on the side of the solid parapets sometimes or damaged ballast shod, so it provides protection to the historic railing and it also -- we wanted to put it on the inside of the existing bridge railings because we wanted to maintain an uninterrupted view plain for drivers coming along Hana Highway.

So the team investigated numerous options for compatibility for historic compatibility and for safety, so all of these options are detailed in the report, and we did narrow in on one particular type of crash-tested railing, shown here, which is the Wyoming 740 interior crash-tested rail, and this was chosen based on -- it seems to be the least obtrusive and has the most open feeling based on the available crash-tested options to date, and we also presented these options during the second round of community meetings, requested community feedback, and we also consulted with SHPD to make sure that these options that are proposed meet the State Historic Preservation standards and the Secretary of Interior Standards.

So we were also looking at addressing the 16-foot minimum width criteria for one-lane bridges. As Virginia mentioned, some of these solid parapet bridges were originally built as wagon road bridges and so they are typically very narrow, about 12 feet, and in those instances, we looked at the option of widening slightly to accommodate present day automobile traffic, and so for instance, this one we're looking at, the exceptional date panel bridges, and as Virginia mentioned, we also wanted to avoid altering the visible historic date inscription that's on, usually, on the makai side of the bridge. So in this upper right corner, we have the original railing, which is the makai railing, and then there's a deflection space that's required by code with the crash-tested rail, and then the 16-foot minimum width criteria, and this portion is the widened portion of the bridge, which is approximately 3 feet or 4 feet or so with the new crash-tested parapet, which will be replaced in-kind with a similar as possible to match the historic details. And then at the bottom-right image that you see here, we have the original railing, this option is for the culverts, which are also very narrow, we have the original railing, and then crash-tested railings on the interior of both historic railings, which allows us to meet the 16-foot width criteria and also keep both original historic open picket railings.

Looking at the open picket railings, where some of these do need to be replaced to meet code, we're looking at replacing in-kind to be compatible with the rest of the bridges within the historic district. This particular type of railing is the C-411 crash-tested railing, it's a 42-inch high continuous concrete railing, with 6-inch wide windows spaced every 18 inches on center, and it stands 30 inches high, and we're looking at this as the team's recommendation because of similar in profile and proportion to the historic open picket railings. Additionally, some of these, the current open picket railings, have a lot of asphalt build up on the deck over time, and so you'll see the bottom railing obscured, I'm sorry, right here, the bottom curb can be obscured in some instances, and so one of the team's recommendations is also to remove the excessive asphalt during future repaving work. Additionally, with this option, this eliminates the need for widening in certain instances. Based on the community feedback that we received during the first and second rounds of our presentation, we received a lot of feedback indicating that people preferred not to widen the bridge and also preferred not to have the metal guardrails, so where it was possible for us to recommend this as an option with the existing open picket rails, we thought that this

would be one ideal option just so that you would not have to widen the road at the locations. And this is a rendering of what they would look like at the East Hanawi Stream Bridge. And then for the solid parapet bridges, where it would be replaced in-kind with another solid parapet, we're looking at several different options to match the details as closely as possible to the existing. And so this is the Kolea Punalau Stream Bridge where you have the original -- the exceptional date inscription on the makai parapet that we wish to avoid altering, and then there would be a interior crash-tested rail right behind that, which essentially remains hidden as you're on the approach to the bridge, and then on the mauka side, you would have a little bit of widening to accommodate the cars and the mauka side would be the new -- the new parapet that's crash tested but essentially unchanged in character, so our main goals with this report were to -- to maintain the historic character of the district and also to incorporate a lot of the community feedback that we received while also helping DOT to address their contemporary present day needs. So with that, I will turn this over to Cody, who will discuss the structural issues with this report.

Ms. Cody Aihara: As you see, the common approach walls to a lot of the bridges on the Hana Highway is this CRM or stone masonry type of wall, this currently does not meet the current crash test level standards so, therefore, we are recommending to have the approach walls reconstructed or if they are missing, to have them added to the bridges at their approaches, and one recommendation, based on current federally accepted wall tested, is this stone masonry guard wall, this allows us to use a concrete interior core system, which would be the structural portion, and then we are able to clad it with the original stones that they disassembled, so we're recommending that the future design team design it with the reusal of the existing stone on the exterior so the exterior appearance will still look like the original CRM walls that were there but the interior core, since it has the concrete base and is federally crash tested, will now meet crash test standards.

One thing we wanted to add to this slide was we had recommendations from the community to start adding bridge names to the bridges, so one recommendation we have is to add it on the upstream Kahului corner of the bridge, and one thing that we are still working with the communities on is the spelling and whether or not they would like to keep the diacritical marks on the bridges. They, right now, do not have a definite answer. We have conflicting from both the associations, the CRC, and internally, so again, I think Virginia mentioned, in the PA, they're going to talk a little bit more about how they're going to approach this for future design projects so, therefore, there's at least a consistency or what's going to be happening, so we understand that this is not going to be constructed at the same time but we would like to make sure that at least when it does happen, and the first bridges are constructed, that they are going to be constructed similarly and, therefore, the resulting outcome will have them all looking the same.

In terms of structural, a lot of the bridges will not be able to meet the new 40-ton carrying -- load-carrying capacity criteria, so we are recommending to strengthen the existing

bridges. Shown here is a typically T-girder bridge that we have a lot of on the Hana Highway, so we're recommending to build interior girders to support the 40-ton as well as exterior girders to accommodate the new loads occurring on the structure due to the new railings that we will be installing. One thing we are going to enforce is that the new design does not hinder the face or the exterior faces of the bridges where the cantilever effect was clearly seen as you approach so, therefore, the exterior girders are to be built inset so, therefore, they are not flushed with the faces of the bridges. And then as Alison mentioned, bridges we found along Hana Highway have a lot of over-paving on them so to help with the load-carrying capacity, also to have the excessive asphalt removed from a lot of these bridges.

In terms of the substructure of the bridges, a lot of the mortar and the joints for the CRM abutments is no longer able to carry the excessive loading from the new 40-ton load-carrying capacity, so we are recommending that the CRM from the facades are removed and documented so they can be reconstructed in the front of the structural reinforced concrete abutments that will be built behind it, so when the contractor does disassemble this bridge, they will have to document and record it prior to it's disassembled in order for them to be able to recreate the historic craftsmanship of the abutment after the structural concrete is built behind it. So, in essence, when this is finalized, you will not see the concrete abutment that's behind it, but now the bridge will be up to current codes.

Along with the 43 bridges and the 12 culverts that were mentioned in the National Registry, there were 7 hillside bridges that the DOT asked us to research. The 7 hillside bridges are located between mile points 11.4 and 19.8, as shown here. A lot of these are just cantilevered off the side of the mountainside so you won't be able to recognize it as you're driving along the Hana Highway. Because they were built rather recently, between 2001 and 2004, they all meet current code standards and do not require any upgrade or retrofitting.

Along with the hillside bridges, we were asked to go along Hana Highway to locate additional culverts that the DOT had on their plans but were not regularly I guess maintained or sought after, so along with the plans, we drove Hana Highway and were able to find 45 of them, hence, we have titled them "The Found Culverts." I'm sure there's a lot more according to their as-builts, but were unable to identify them, so the DOT's concern, again, is for them to meet current standards so rehabilitation of these culverts will be addressed in the same manner of the bridges in terms of the stone masonry guard wall and everything, so the crash test standards and everything are in effect.

With that, everyone I hope was able to read the pre-final draft report. If not, it's still available for download on the FTP site, if you have internet access. If not, hard copies have been distributed to these four locations. Contacts for your comments, Paul Santos, at the DOT, who is the main client that we are presenting this report for, and then Charlene,

and if you're unable to mail her, you can also call her at her office and she'll get your comments to us.

Okay, comments, if possible could we get them by this Friday, since we've I think two months you guys had time for this review, so the wrap up of this final report is at the end of the month to DOT, so we want to ensure that we get your guys' comments into this report. So if possible, can you please either contact Paul or Charlene by this Friday, and then we'll work it into the report. And with that, thank you very much for your time.

Chair Mardfin: Thank you. Do any members of the Advisory Committee have any questions or comments?

Mr. Gale Notestone: I have a question.

Chair Mardfin: Gale.

Mr. Notestone: Yeah, I'm Gale Notestone. I apologize to the Committee for being late. I work for the Fire Department and who are the engineers who designed the improvements?

Mr. Aihara: That has not been assigned yet. This is a preservation planning, so this has not even gone to the design team yet. So what we're trying to do is we're trying to come up with recommendations and -- historic as well as the structural or engineering portions that we know need to be addressed to bring these codes -- I mean these bridges up to meet current code standards, so then these recommendations would then go to the future design team to start with. And then when that gets awarded to whoever consultant it is by the DOT, they will have to do this community meetings and everything again with their concrete plans as to how they are going to go about with the recommendations.

Mr. Notestone: Yeah, my concern, we have a bridge that is above Koki Beach, we call it the "make man bridge," and it was rebuilt, and the design is good, but if they would have just angled it a couple feet left --

Chair Mardfin: They just did this in within the past year or two.

Ms. Aihara: We've heard about this from several other community meetings as well. Unfortunately, that bridge is on the county side. This is only on the state portion. So in terms of the alignment and all of that, the approachment, that is already taken into consideration in our report. We do have a traffic engineer who did look at the approaches, and so it -- again, this is a preservation plan so we can recommend that some of these bridges have them, when they widen it and such, to have it realigned appropriately for the turn 'cause we know there are some -- especially some of the solid parapet bridges, we

noticed there's a lot of scrapes on the downstream side, so we know that that definitely needs to be addressed.

Mr. Notestone: Yeah, you're going to see some yellow there from our fire trucks but --

Ms. Aihara: And actually that was another concern that this project had is that, you know, the emergency vehicles have issues coming into Hana or cannot come into Hana, so that's where 40 tons is the current code right now, by AASHTO, the American Association of Traffic and Safety standards, so they issued the 40 tons and, therefore, what we're trying to do is just bring it to code, which then definitely fire trucks, EMS, all of those vehicles should be able to get onto the roadway, turning radius and all of that should be accounted for. The only thing, like I mentioned, is the future design team will design it accordingly. We can only instruct them to do to code. But we are not, according to community's concern, going to post at 40 tons, but we'll have EMS and fire and everything know that it's okay for you guys to drive on.

Mr. Notestone: Okay. Last question.

Ms. Aihara: Yes.

Mr. Notestone: With the improvements, do you anticipate complete closure of the bridges?

Mr. Aihara: Oh, okay. If you have not looked Appendix B or C yet --

Mr. Notestone: My apologies.

Mr. Aihara: We have temporary bridges at all the bridges, so that was something that we had a very kind person come to one of the Hana meetings, it was your mail carrier, and she's like I am not driving around the island for three hours just to deliver mail, and we understand her pain, so we definitely will have a temporary bridge or we are proposing, again, planning stage, we are proposing to have a temporary bridge located at each one of the bridges, and also this will resolve the issue of a lay down or a area where the contractors can keep their material, which was another concern of where they're going to put their stuff and are they going to keep trucking back and forth, so that was another issue that we wanted to resolve by having this temporary bridge location, and that, too, we are trying to work it out with our traffic engineers to make sure the approaches to the temporary bridges are also something that's feasible easily to go by.

Mr. Notestone: Thank you very much.

Ms. Aihara: Yeah.

Chair Mardfin: Any other members of the Committee? Mr. Blumer-Buell.

Mr. John Blumer-Buell: Thank you, Chair. I just want to say an initial comment that I thought the document was really interesting reading, and even though there's some mistakes, it's very well done. I just wanted to say that. I enjoyed seeing the original architecture renderings in there. Nice and stained and everything. So I have a few specific questions. One, when the county has been replacing the bridges on the Kaupo side, they've each required an environmental assessment. Now, from what I know, unless the law changes dramatically, each and every bridge that you replace or rehab will require an EA. Is that true?

Ms. Aihara: Yes. So that's another issue where the programmatic agreement may come in where we can write maybe one EIS and take care of the entire project encompassing in that so, therefore, an EIS will not have to be issued for each and every bridge, which takes about two years or so for the entire process to go through, I think ...(inaudible)...

Mr. Blumer-Buell: So you're going to do a whole bunch of them at once?

Ms. Aihara: Yes.

Mr. Blumer-Buell: Okay.

Ms. Aihara: That's what the DOT is envisioning. Yeah.

Mr. Blumer-Buell: The reason I ask was just that this is so much information that if you have an EA or an EIS review, then you're going to be able to address the fine tuning at that point. Mr. Chair, can I ask a couple more? I just wanted to bring up the point that this is called "a preservation plan," and from what I see, that's actually what it is. The County of Maui did a preservation plan around more than ten years ago and I had some lively debates with our Public Works people about whether it was in fact a preservation plan at all because it wasn't, and they admitted it finally. It was actually a plan to tear down most of the bridges. So one of my comments would be to ask you to really look at rehabbing the bridges, you know, to not tear them down, to actually rehab them and, you know, I know that part of the rationalization of tearing all the bridges down was that it was going to be less expensive than rehabbing, but I think there's more to it than just the money. So, you know, when you look at those things, I mean, you know, there's a sensible balance between spending money and the aesthetics, so I just would like that to be an important part of it. So that's my comment on the preservation plan. I have a comment on just looking at the cultural part of the -- of your document, and I thought there was really a lot of interesting reading, I didn't read 1700 pages, but I read a lot of it, I would suggest to put the bridges in a cultural context. It would be good to have someone give a Hawaiian cultural expression of the water, wai, W-A-I. What does that mean to this whole -- you

know, this is -- that's really an important part of this is the wai and the Hawaiian words for wealth are "waiwai," so I know there's some very good people that could -- it doesn't have to be a long thing, but I think the water is such an important part of the cultural context, and we do have someone in Hana that has been talking publicly about water as deity, and so there's a much deeper context to all this, I know this is about bridges, but it's also about the environment and the way the people have used it and that would be the water, you know. I see that other people in some of these comments, Jonathan Starr, from Kaupo, but I was concerned too that with the bridges that weren't quite wide enough or just the minimum 16 feet, I think that's it, but when you put those into your railings, you might bring them into noncompliance. Is that true?

Ms. Aihara: Right. So that's the -- yeah, so that's where the option of replacing the railing with an in-kind versus attempting to keep it --

Mr. Blumer-Buell: Right.

Ms. Aihara: Became an option and, of course, they categorized what was exceptional examples of particular railing types, and which ones were either severely damaged or were very common that there was other better examples of that type of railing, so in those cases, if we could replace it with something similar and not widen the bridge, that was a preferred option.

Mr. Blumer-Buell: Yeah, and I did see a number of good examples in the report, there's one called the "Texas railing" or something.

Ms. Aihara: Yes.

Mr. Blumer-Buell: That look like a lot of the railings that we have on our bridges, I'm not suggesting that 'cause there was other ones that looked -- looked nice too, and so I just wanted to clarify that, you know, that the crash railing inside was -- I'd rather see you, if it really needs it, to replace it with something similar than to put a metal crash railing on the inside of it.

Ms. Murison: ...(inaudible - not speaking into the microphone)... oh. So the couple of examples where we utilized that in particular was, for example, to protect the exceptional date panel side and the curb, those are some of my favorite bridges --

Mr. Blumer-Buell: Right.

Ms. Murison: And so we wanted to not even mess with those bridges but instead protect the historic feature.

Mr. Blumer-Buell: Yeah, well, I think people appreciate that keeping the old bridges, if possible --

Ms. Murison: Yeah.

Mr. Blumer-Buell: So that's that comment. I do have a comment on A-109 and your reference to fiber reinforced polymer, and I would ask you not to -- the document kind of suggested that's not a good material to use. I would ask you to be open to using polymers and other -- other substances that are ongoing, you know, there's things being invented all the time, so I'd just like you to be open to that. During the -- some of the earlier bridge hearings and discussions about replacing the Hana Wharf, the deck in particular 'cause a lot of the footings are still good, I have documents that showed that you could use some of the new epoxies to actually inject them to replace rotting rebar even in saltwater. So I'm simply saying that don't discard these new inventions, which are happening all the time. They may be better and longer-lasting than anything else. Another thing related to that is there was a group, in the last 20 years, that was one of the first to work on this called "The Alliance for the Heritage of East Maui," Dorothy Pyle, was the head of the Cultural Resources Commission at one time, she's a great person and source for this kind of thing, but I think it was in working with her that we brought over one of the head highway people from Oregon, and one of the things he talked about was the fact that they were running electricity through the bridges, and through their bridges, and even in things like a pier, and that they were being very successful in keeping the bridges from deteriorating with those electrical charges, so that's something I think that, you know, could be looked at as well. I mean this is not reinventing the wheel. Oregon's been doing this for a long, long time, so you might call the DOT in Oregon and see what their up to because one of the reasons that the fiber reinforced polymer was discouraged in the report was because it's never been tried in wet climates like Hawaii. Okay, it's really wet in Oregon too, so they have a lot of -you know, they have some very practical experience with this, it might save a lot of money in the long run, and it might cost the taxpayers a lot less money.

Ms. Aihara: Can I say something?

Mr. Blumer-Buell: Sure.

Ms. Airhara: For two parts. First for the FRP. The FRP was discouraged by our client, DOT. DOT said, basically, because like you had mentioned, it has not been tested in long term in terms of this environment and also in terms of the longevity on the bridges because their concern is there's never been an instance when it started to fail yet, it's not saying that it doesn't happen, but when it does, how do you repair it? Do you cut the fibers? Do you but the strip? Do you have to rewrap the entire bridge? Is it just part of it? And then, you know, when you cut out the portion that you found is delaminated, do you compromise the rest of the wrap in that area? There was just too many questions that nobody had an exact

answer. So the way we kinda put the work around in there is to mention it, that we did consider it, but we also have a disclaimer in the front of the report saying that if the future design team has a better alternative of, you know, these recommendations or a better way of implementing these upgrades and rehabs, then they can more than likely present it to the DOT as well as SHPD and get it approved. So what we're, again, presenting is not set in stone in how someone should do the recommendations of repair. FRP, I agree with you, is one way we have done the Ihiihilani Bridge on Oahu where we wrapped it, it's an open spandrel arch bridge, it looks kinda like Waikani, near the ocean, constantly sprayed, totally spalled out, and we had an FRP, and it's beautiful now. We painted it and everything so it matches the rocks and everything, and the scenery. So we have seen FRP work, but because they are so iffy and kinda worried about it, they don't want it to be the recommendation option, an option definite, but not the option to consider for rehab at this point.

And then the second part for your electric through, so that's the cathodic protection, so we reached out to a cathodic manufacturer on Oahu and kinda asked how they would go about it. The one thing that we were concerned about is that all of these must run on some kind of power, battery, whether we need to soak it in some kind of oil liquid to preserve the battery from deteriorating or corroding, and then same thing with the rebar, we asked: How do you apply the electric through it? They actually have to make holes or spalls into the concrete to attach these anodes and cathodes, and if in the event that the rebar, at one point, is corroded through or spalled through, and the electric doesn't run through the other then, then they would have to make another hole into bridge and then it could come into this massive more deterioration of making all these pockets just so they can attach these anodes and cathodes to it, and then also what comes into effect is the chlorides that's in the concrete that also help with the acceleration of the deterioration of the rebar, so that came into like this whole massive like is that a good option, so it is mentioned in Chapter 5, but in terms of how the DOT goes around preserving the bridge 'cause it definitely a good method in preserving bridges and it can be done; cost wise, it would definitely make it look like a very bad option at this point without actually testing, and because we're preservation, we can't, at this point, ask for the DOT to go and actually take some like core samples and see is it really not a feasible action because -- so we didn't want to totally jinx it out of being an option way to preserve the bridges so it's still mentioned in the report as a possible way to preserve it, but in terms of having it written flat out to do the cathodic protection, we have not written it in such a manner.

Mr. Blumer-Buell: Well, just the fact that it's in there and you're open to it, that's really what I'm expressing, you know. The other thing, and this is a minor point, but if you found bridges where there was still intact rebar, you know, you may decide that the electric treatment is good for, you know, one, two, or three even. There's the -- there's solar seems to be working along the Hana Highway for the emergency phones, so that's a possibility, it doesn't take much juice to run those systems.

Ms. Aihara: Oh, I did ask our electrical consultant and he said the lines that are currently run on Hana Highway cannot juice the cathodic protection. They would have to run a brand new line in order to run electrical, or else we have to do that battery issue at each bridge that they would have to maintain.

Mr. Blumer-Buell: Yeah, I was just suggesting the idea of solar but I don't really know so --

Ms. Moy: And just to make another point, I mean, and Cody already did it, but just to make sure everybody knows that this is -- this preservation plan represents, I guess, today, so we do have a little disclaimer, I guess, or something that's in there that says that -- 'cause there might be better -- there might be better options for railings, there might be better options for so many things in the future, 'cause this is -- they're not going to replace the bridges or rehab the bridges for, you know, 50 years; something's bound to -- some new inventions bound to come up so we don't want to disclude any of it, but we just cannot know for sure everything in the future, what might come up, so we are making sure that the future designers are sort of open.

Ms. Murison: I also wanted to add one other thing. In - I don't remember if it's Chapter 5 or Chapter 4 - but the Federal Highways Department has really taken a turn toward preventive maintenance on bridges, and they say that this, in the long run, saves a lot of money and instead of deferred maintenance, preservation maintenance, and it used to be, from what I understand, that federal money was not allowed to be used for maintenance, but in terms of preserving the life of a bridge, if it can be shown that it'll extend the life by at least ten years, then that is also a viable option prior to doing more major rehabilitation, and that is covered in Chapter 4 or 5, I can't remember which.

Mr. Blumer-Buell: I did read part of that and we have a number of, you know, some new bridges Kipahulu side of Hana Town, and they're recent, but if you look at them, I looked at them while I was driving in, you know, they've got grass growing where the asphalt meets the concrete, and this is what wiped out a lot of those bridges, you get the water going under the asphalt, gets in there a little at a time, the bridge gets heavier, and then everything starts falling apart. So I couldn't agree more that the maintenance is extraordinarily important. And there's one other comment on the maintenance is I would suggest everybody look at the option just for weed-eating, you know using weed-eaters just on the bridges, or hand pull the weeds, they're not that long and so forth. What we have a lot of happening along the Hana Highway is the state and county are using chemicals that are restricted and not supposed to be sprayed anywhere near waterways, that's their normal thing, so I'm not speaking against that, but I am speaking against doing that directly on the bridges, you know, particularly when the streams are flowing, you know, 'cause then you get that -- you get the over-spray going right into the ocean, so that's a maintenance suggestion. I'm going to let the Chair call on somebody else.

Chair Mardfin: Anjoleen? Scott? Gale? I've got a couple things and I'll let you go. You mentioned scraping the highway -- scraping the bridge to lower the weight. Are you going to have a -- like a six-foot -- six-inch drop or something or?

Ms. Aihara: In terms of the excessive ashpalt?

Chair Mardfin: Yeah.

Ms. Aihara: That's what you're referring -- no. What we want to do is we want to return it back to the original, I guess, approach which -- whatever the fill, two inches of asphalt, whatever the as-built drawings had for the bridge. Now we understand that they may have built up the approaches as well to these bridges --

Chair Mardfin: Yes. That's the point.

Ms. Aihara: So that also will be worked into our report that the approach -- because the approaches is still part of the bridge --

Chair Mardfin: Okay.

Ms. Aihara: So we can make sure that that is also taken cared of with the excessive asphalt.

Ms. Moy: And one of the things another community member brought up at another meeting, which I think we are looking to incorporate that, right? Is to use, instead of when the deck has to be rehabilitated, instead of using asphalt on it, to use concrete, you know, we could color the concrete so that it's not as bright, but just, you know, that concern was environmental as well as the you wouldn't have to put asphalt on it again, right, so anyway, so that was one of the suggestions that was brought up at the last community meeting and we're thinking that -- and DOT liked that idea too so --

Chair Mardfin: John, did you want to go again?

Mr. Blumer-Buell: Thank you, Ward. On what you just said, I agree with that because when you keep putting -- I mean the county and the state has ground down a number of bridges already over the years, and you're right, they did increase the -- you know, they had to bring everything into -- into harmony on the height of -- and so forth, but if you're putting down fresh asphalt, a lot of the oil's going right into the streams, so with the concrete, you're not putting the oil into the streams and that's, you know, that's a very important cultural issue for a lot of people because the, you know, the oils can end up down in the brackish water at the ocean and that's where a lot of the spawning takes place, so that's a real -- I'm glad you brought that up. That's an important consideration.

Ms. Aihara: So just to make sure that we're clear. Is this HAC agreeing that they would not mind that option of a concrete topping on the bridges, and only the bridges, so it's not going to expand outward, just the bridges along Hana Highway?

Mr. Blumer-Buell: I wouldn't mind that at all and, you know, if you do that, I'd put in some concrete for driveway strips that, you know, you gotta put -- you gotta scarify it very heavily otherwise it can be slippery, so you need to really put those grooves in there and drain it off to make it work, but I don't see any problem with that. It's going to get dark pretty quickly anyway and that's --

Chair Mardfin: Cody?

Ms. Aihara: Yes?

Chair Mardfin: You asked whether the Committee is approving that. This is one member that's suggesting this. We haven't voted on these things yet.

Ms. Aihara: Okay.

Chair Mardfin: So treat it as one member's comments at this point.

Chair Blumer-Buell: I was -- I'm concerned about the widening of the roads to access the bridges, you know, and I'll give you a very specific example right now, that's at Kaniwai, above Wailuanui, I think it's bridge 19, it's the exceptional bridge in the state, it's the arched bridge, okay, now, what's happening there is on the -- on the Keanae mauka side, there's like a straight cliff there, and there's like three or four or five no parking signs, and apparently the tourists either don't read or can't understand no parking, so there is a serious problem there, meaning that people ignore the no parking and sometimes there's ten cars parked there, and it's basically mixed into one lane road and on the other side, you know, there's just -- it makes it a mess. I've waited there last week for 15 minutes. And so, you know, there needs -- there is a area people have started using as a parking lot Hana side of that. Now, maybe a sign that says "parking - 300 feet" but I'm going to pursue this with the DOT right now, not wait for ten years.

Ms Aihara: That was another issue that was brought up at a earlier meeting about why don't we put signs saying parking here or stop here for parking, but the DOT said that they didn't want to be liable for those signs in the event that somebody, I'm not sure what exactly liable for, so that sign in terms of telling people parking here, they were kind of, you know, avoidance in saying yes to but making signs that says there's a turnout here or, you know, there's a turnout ahead, they were more accepting or willing to do or consider. So -- and that was at a Hana -- Hana Town meeting that someone had mentioned that, and we had two of the DOT representatives there, and they were saying that they thought that was

a great idea, and that was something that we can put in our report as a issue to be considered for the future design team maybe if there's a turnout near your area maybe implement the sign since you're there doing this work.

Mr. Blumer-Buell: That --

Chair Mardfin: John, Mr. Notestone wants to speak.

Mr. Notestone: Thank you, Mr. Chair. I wanted to comment on the -- thank you, Mr. Chair. I'd like to comment on what John said. Many times in emergency response, and in this bridge in particular, when we get to that bridge and there's a stack of visitor's cars there, we actually have to have -- I have to deploy one or two of my firefighters to exit the vehicle and direct traffic and reverse so we can make our way through. So this is a very important issue.

Chair Mardfin: Anjoleen.

Ms. Anjoleen Hoopai-Waikoloa: I'd like to just share in that same area though there's that concrete versus asphalt, because of that natural water that come off the side, we have asphalt, right, we have to always repave that area because nature wins, so putting concrete down, the longevity is probably more beneficial and environmentally friendly than always laying asphalt down. In terms of traffic, I would say, on the highway, that's probably where I get my road rage because, you know, if I'm driving a school bus, 'cause I coach too, it's like come on people, move over, keep moving, you know, so having the correct signage or something out there to prevent emergency vehicles from being delayed, just normal traffic flow, something in that area, even if it's -- even if it's some kind of law enforcement, you know, they're going to say we don't have the money for it or the manpower, you know what? If you can cruise around a lot, send one guy once a week down there to enforce it. If you look at the days of the week, I did my own study before, and I found that Tuesdays are when we get the most tourists in Hana, so that would be my recommendation is go on that day, is on Tuesdays, but that's only my own personal study thing that I did.

Chair Mardfin: This is a recommendation to the police?

Ms. Hoopai-Waikoloa: Yes.

Ms. Aihara: To add to that, in Chapter 6, related issues, we are suggesting that maybe the tourist board use maybe some funding to create brochures or pamphlets about road etiquette in like the Hana area, and so maybe this can be applied to that as well that in the brochure, you know, there's this beautiful bridge, Waikani, with parking here and here. Do not park at the bridge. And I've done the bridge inspection on Waikani before where a Maui Police has ticketed people, it was great 'cause we had to walk down to get over to do our

bridge inspection so, I mean, it was great, so Maui Police does go around, just maybe not as often as we've seen it.

Chair Mardfin: Mr. Blumer-Buell.

Mr. Blumer-Buell: Yeah, I didn't -- I may have missed this part of it if it's in the document, can you try to anticipate what laws may need to be changed in the next 5, 10, 20, 50 years that would make more sense of things? Now, here's why I mention that. One of the first bridges, the most controversial bridge that came up in Hana was Papahawahawa Bridge, near Kipahulu side, and, you know, there was a lot of, you know, angry discussion about this, and it was at this point, along with some neighbors, I live in that area, and with the Alliance of the Heritage of East Maui, everyone got together with the state and said, look, the one lane bridges or one-and-a-half lane bridges are an asset, so my point is that everybody finally ended up recognizing the narrow bridges is an asset, and I'm just saying that if there's problems you encounter, you know, that you see this is an area where we need legislation, I think that would be a good section to have in there. The other positive thing I wanted to say about what you did is just the recognition of those temporary bridges. We went through a big argument with Public Works. At Papahawahawa, they just wanted to put a concrete culvert and throw some cinders over thinking that would work. It's a dry stream, but anybody that lives there knows when it flows, it'll take anything away. So, you know, that was an argument that led to the recognition of the temporary bridges, which we had known about before, and a bridge towards Kipahulu, called "Peahi Bridge" --

Ms. Aihara: Paihi?

Mr. Blumer-Buell: Paihi. Excuse me. That was where the county recognized that they actually called me and other people and said what was that about these temporary bridges, and they -- you know, we put them in touch with the engineers of the company within a couple hours and they had an agreement the next day. So, you know, the point is that recognition of the temporary bridges, and I think this could even be a -- something the county might be interested in. They have one that's -- I think it's not in use right now, it'd be good to have some extras if you do do it, they're expensive, but it's worth it, you know. And two things before I forget. How long is -- what's the time scope of this whole thing? Are we talking about 10 years or 50 years or, you know, what is the realistic time frame?

Chair Mardfin: John, I think that's a political decision more than an engineering decision at this stage, but they can answer however they choose.

Mr. Blumer-Buell: Yeah. It wasn't meant to be political. I'm just wondering how long -- how long it'll take.

Ms. Moy: I think DOT has said it would probably span like 50 years for the whole --

Mr. Blumer-Buell: Well, that makes sense because by kinda common knowledge at this point, about 75% of the bridges in the United States, including Hawaii, need to be rehabilitated or replaced. That's a pretty common figure. So --

Chair Mardfin: Can I ask a related question? I didn't read all 1400 pages, I read sections that I read quite carefully, but I didn't do all 1400. Did you -- have the engineers looked at the bridges and decided what priority -- which ones are most in danger of utter failure and which ought to be fixed first, so is there a priority listing?

Ms. Aihara: Okay, so that is something that the DOT asked us to look into, and, in essence, since all the bridges is in need of some kind of rehab to meet the criteria of either the railings, the width, or the 40 tons, engineering-wise, the engineering side of the team basically said that priority is the entire highway, so for what we think being logically would be to start from the outside and work in so, therefore, when you rehab the earlier bridges, it can carry heavier truckloads because you know it's been brought up to code, rehabbed, and then bring it into Hana Highway and just work your way in, and another reason we wanted to do that way is that if we do, you know, spot here and there within the highway and you still have to travel these lower capacity bridges, that's that much more vehicles that need to transport materials over these bridges for wear and tear, but that's just the engineering side. Historic side, there is a priority in terms of trying to preserve. Since we know this project may last 50 or more years, we want to make sure that the bridges that are currently in good condition, good standing, in both characteristics and structurally, that those maybe we can consider saving for last, and then do the ones that, right now, look like they are in need of the repair or the rehab and the character.

Chair Mardfin: Yeah, that's what I was ...(inaudible)... prioritization.

Ms. Aihara: Yeah.

Ms. Moy: And, well, DOT sort of has a little bit of a prioritization already and theirs one was by loading capacity, the lowest loading capacity are the ones that are on their priority list, so we actually are in the midst of trying to maybe meld all this together to develop a more solid priority list but, you know, we have to talk to DOT about that.

Chair Mardfin: I'm going to comment on this in terms of cost, I mean, if you do them one at a time, but consecutively, you can use the same span temporary bridge and just kinda leapfrog it along, and if you're doing the same kinds of bridges in one contract, you might be able to -- the state might be able to get a lower cost on doing several open parapet or a couple of closed parapet. So there are different kinds of considerations here, but you don't have to answer that. I was just tossing that out.

Ms. Murison: Well, also, you'll you notice in Chapter 7 that the bridges themselves were constructed in clumps, so, you know, addressing them in clumps may not -- particularly the non-exceptional contributing open parapet where there's ten in a row, you know, and if there's a good lay down area and so on, so, yeah, the highway was actually built that way due to politics, funding, and disasters.

Chair Mardfin: And the labor availability.

Ms. Murison: Yes.

Chair Mardfin: From prison labor.

Ms. Murison: Yes.

Chair Mardfin: I want to, if you don't mind, I had given, two weeks, when we got -- this got postponed, I gave the group this errors in preservation plan, and discussed it, I was kind of irrate 'cause this, originally, was written in January of this year, and given out, and then in the stuff we got, none of it seemed to have been addressed at all. And Charlene got back to me with some notes 'cause I had said, you know, where I got the information. The biggest issue, in my point of view, was what you called the stream right by Puaakaa Park, and I want to ask my Members: What do you call the stream by Puaakaa Park? Don't look at my notes. What do you call it? Do you have a name for it? John? Okay, I had a State DOT map, a straight line map, they stretched it out, and that says it's Paakea, and the bridge just to the Kahului side of that is Waiohue, and the comment that I got -- and so I put that in January, then I reiterated it in August, and I got thing back that says, "DOT confirmed the straight line map is incorrect at this locations." And I spoke to Fred Guiterrez this morning about it, and he concedes that it was probably an error. So there's a -- so the one right by Puaakaa should be Waiohue, and I'm willing to concede that, but I always like more than one source, so I also checked a USGS map from a 1999 Department of Interior map that shows the streams, it doesn't show the bridges, it shows the streams, and it shows that closest to Keanae is Puakaa, one A, well, P-U-A-K-A-A, the next stream is Waiohui, the next one is Paakea, and so that would make sense in terms of the names, so I'm giving up -- I'm accepting facts that you're probably correct on -- I'm always trying to talk to some people that live in the area to see if they agree, but that's -- I think you've got it right now. There is a spelling still issue on that Puakaa, and I noticed one place you recommended be changed to Puaakaa.

Ms. Aihara: Yes.

Chair Mardfin: I would recommend that you not do that because, and I sent a photo to Charlene about this, coming from this side, you go to Waiohui, then the road goes around, comes back, and there's some guardrails there, and it might be a culvert you're calling it

or something, Francis Kaaumo says that's the true Puaakaa, and then you get to the next bridge, and if you wanted to go with Puakaa, I could live with it -- well, I don't care, I'll be happy to live with whatever you want, but I think you ought to really, really check that name, but if you have Kepa Maly doing this, he will do a great job. He's a wonderful guy. I'm really glad you're getting him. And just encourage him to talk to people in the community, but he's smart enough to know how to do that anyway. I sent you a bunch of changes to spelling and it looks like you're going to take that into consideration. The one that we just fixed up here, by the fire station, that is called "Holoinawaewae," and that's -- you're going to put that in. I tried for two years to tell the Planning Department about that and they kept ignoring me.

Ms. Aihara: Did you look at the name? It's on the upstream parapet.

Chair Mardfin: I didn't look at it.

Ms. Aihara: It's on the exterior. The name is not on the inside.

Chair Mardfin: I'll go look at it.

Ms. Aihara: But the date is wrong.

Chair Mardfin: What do you have - 1915?

Ms. Aihara: They switched it, so it seems like it was built in 1951.

Ms. Shibuya: ...(inaudible - not speaking into the microphone)...

Chair Mardfin: Yeah, I think it's 1915.

Ms. Aihara: It is.

Chair Mardfin: That was on the makai side.

Ms. Aihara: It's on the mauka side.

Chair Mardfin: Well, you destroyed the makai side. You extended makai. The date was on the makai side.

Ms. Aihara: We could not confirm that 'cause we didn't have photos of the downstream parapet, but we thought so.

Chair Mardfin: I will show you photos of it. I have photos of it.

Ms. Shibuya: ...(inaudible - not speaking into the microphone)...

Chair Mardfin: Okay. Yeah, that's okay. It was one that we conceded should be widened and I think it was this body that --

Ms. Shibuya: I believe that bridge was built ...(inaudible - not speaking into the microphone)...

Chair Mardfin: I know but --

Ms. Shibuya: ...(inaudible - not speaking into the microphone)...

Chair Mardfin: Well, there was, I was at that meeting, there weren't a large objection to that 'cause it really was a bottleneck, particularly for the Fire Department 'cause they've gotta cross it every time they want to --

Ms. Shibuya: Yeah, it was ...(inaudible - not speaking into the microphone)...

Chair Mardfin: Yeah, but I didn't hear anybody complain about it being widened, so that's good.

Ms. Shibuya: ...(inaudible - not speaking into the microphone)...

Chair Mardfin: They put 51? I'll give you a better one. Papahawahawa, they had the name backwards -- the number backwards. Did you ever keep that? Good they cut that out.

Ms. Shibuya: Yeah, but you know why because --

Chair Mardfin: Thank you.

Ms. Shibuya: What happened is that imprint is actually backwards.

Chair Mardfin: Yeah. They put the numbers down, they poured concrete over it, and they looked -- they made it look right from what they looked at and didn't think about it being backwards when they picked it up. That was cool.

Ms. Shibuya: ...(inaudible - not speaking into the microphone)...

Chair Mardfin: Right. I know. Anyway --

Ms. Aihara: So what I presented to you is a photo of the name in the --

Chair Mardfin: Can I keep this?

Ms. Aihara: Yes. I have a copy.

Ms. Shibuya: That one has the diacritical mark --

Chair Mardfin: Oh, but you got the 1951. You're going to change that to 1915? Not you. Somebody's going to change that to 1915?

Ms. Shibuya: Well, you know, when I talked to the inspector ...(inaudible - not speaking into the microphone)...

Chair Mardfin: Yeah. it should be corrected.

Ms. Shibuya: ...(inaudible - not speaking into the microphone)...

Chair Mardfin: Any other questions? John, finish? Yes. Go ahead.

Mr. Blumer-Buell: I have one suggestion and one procedural question for the Chair. Near Kamahina State Park, you know, this goes to some signage, and both the state and county will always talk about the liability of everything, and, you know, there's been some lively discussions about things, but, you know, right there you have a sign that says "Falling Rocks" next so many miles, you know, and what that is legally is an admission, you know, that's a dangerous spot and somebody may get hit by a rock, it's a serious issue because we had a wonderful teacher at Hana school that was killed by a rock, big rock, so I don't mean to make light of it, but they could put -- make the sign say something like "Drive slowly. Watch for rocks on road," something like that, rather than, you know, just try to make it safe and not make us all liable for it, we're going to pay for it if there's a problem, it's not to hide anything, but let them know there's rocks on the road and go slow rather than, you know, and then this is for the Chair to defer to the right person. My -- just my feeling is, at having looked at all these exhibits of individuals in the community and the Kaupo community and so forth, that they're -- these have been accepted as comments, right?

Ms. Shibuya: They're actually going to be included as an appendices ...(inaudible - not speaking into the microphone)...

Mr. Blumer-Buell: Okay, I mean what I was getting to is that my suggestion would be, unless we have to make motions for dozens and dozens of things, that we just -- can we just accept the suggestions from this Committee as going into the record? I think they've -- I think, you know, from the appearance of these other things that the communities didn't take a vote on it, they just took, you know, individuals made suggestions, they've been

accepted into the record, so if it's possible, I would just suggest that everyone's recommendations and comments that came in here --

Chair Mardfin: John?

Mr. Blumer-Buell: Would be --

Chair Mardfin: John?

Mr. Blumer-Buell: Yeah?

Chair Mardfin: John, are you saying we need to -- each of us write down our positions or you're relying on the minutes from this meeting or what?

Mr. Blumer-Buell: I would rely on the approved minutes or the minutes if -- whatever --

Ms. Shibuya: ...(inaudible - not speaking into the microphone)... but it's just that the minutes take like, you know, a couple of meetings or so to actually get approved, so this last one might be difficult to get it in, but we still would have a summary of, you know, all the comments you ...(inaudible - not speaking into the microphone)...

Chair Mardfin: John, let's -- let's do this, if you're agreeable, Jennifer has very kindly been taking, and I think Ryan has been taking notes of the essence of it, and we could have somebody make a motion, one of you make a motion -- they would read the comments, if you basically think that covers enough of the essence of what you want, we could vote to approve those as some of our comments on it. I would want to point out, however, very strongly, and I hope the motion will address this, the fact that we haven't spoken about something on any of 1342, you know, we talked about some of the pages, but the other 1342 we didn't talk about doesn't mean we're in full agreement with, it just means we didn't say anything, and we have the -- at least I would want to retain the right on any individual bridge situation, which would come back to us anyway, to address it. You know, I didn't talk about Ohia Springs, particularly. I think that's a special area. And I don't want to spend this meeting doing that. But you shouldn't infer that because we didn't negatively react to something, that doesn't mean we won't negatively react to it in the future.

Ms. Moy: Right, and that's why -- that's why the construction project will always come back to the community.

Chair Mardfin: Okay.

Ms. Moy: So it's just sort of like a guide for DOT so that they don't have to start from --

Chair Mardfin: Right. I agree.

Ms. Moy: Every single time they do a bridge, you know.

Chair Mardfin: I agree. And I'm very happy with it. You improved the archaeological and history part, much, much better than it was. I mean it was shameful the way your first consultants had turned it in, but it's much improved. You've incorporated a lot of modern information about how things were settled and everything. If anybody has individual comments, now's the time to make them. Not having that, Ms Hoopai-Waikoloa, would you like to make a motion?

Ms. Hoopai-Waikoloa: I would like to make a motion to approve and recommend the comments as stated and discussed by the Hana Advisory Committee today.

Chair Mardfin: Do we have a second?

Mr. Notestone: I second.

Chair Mardfin: And Gale Notestone has seconded the motion. Before we vote on it, I would like -- she's going to need that back to read off the major points. Can I have the yellow sheet, please? Jennifer is going to read off the major points she made and Ryan's going to supplement it with anything that she misses.

Ms. Jennifer Oana: So this more notes than comments ...(inaudible)... okay, the first one was Kepa Maly has been hired to review the bridge names. The future design team should consider emergency response vehicles and other emergency vehicle in their design. For certain bridges, the future design team should consider all of the approach angles. Temporary bridges should be considered for all bridges so that the contractors construction material can be placed in an appropriate area. As far as environmental assessments, this could be addressed in the programmatic agreement so that maybe there could be one environmental assessment to take care of the entire bridge project or maybe in phases.

Ms. Moy: ...(inaudible)... maybe, yeah. But EAs will have to be done whether it's going to be done individually or through a programmatic agreement in bunches.

Ms. Oana: Do you want to, Mr. Blumer-Buell, do you want to amend what I said at all with regard to EAs?

Mr. Blumer-Buell: I agreed with what our Chair said just in terms of, you know, we'll make future comments and that we don't necessarily agree with everything. It seems to me, and I'd like a comment from the consultants, that the disclaimer on page 1 kinda covers that. Would you comment on whether that's true or not?

Ms. Aihara: The disclaimer right now is very general so it's any future development more for I guess improvements in codes and in methodologies, so I guess encompassing of how the environmental issue will be addressed, specifically, is not really encompassed there, but we do have it listed as an item that needs to be addressed in Chapter 5, in terms of an environmental assessment or EIS, it does not be performed on each bridge.

Mr. Blumer-Buell: Right, and just very brief, I'm going to read two sentences at the end of the disclaimer, which really include this, which point to the community in future input: "If other methods to accomplish bridge recommendations are available to the future design team and pursued, then reevaluation of those methods will need to be considered by all parties before implementation. These parties include, but shall not be limited to, HDOT, FHWA. SHPD. and the local communities."

Ms. Oana: Okay, the next comment is rehabilitation of the bridges is preferable to tearing them down. Another comments is to suggest to put the bridges in a cultural context, for example the Hawaiian expression of wai. Water is an important part of the cultural context. Replace the bridges -- where the bridges are not wide enough, replace them in-kind.

Chair Mardfin: That was their comment, not our comment.

Ms. Oana: That was Mr. Blumer-Buell's comment, and they did answer that with a couple of examples where the ...(inaudible)... and the curved bridges which they're doing that inkind replacement.

Ms. Murison: Point of clarification. I wouldn't say -- we're not replacing any bridges. It would be replacing components of the bridges.

Chair Mardfin: Would you say that into the mike? I heard you but --

Ms. Murison: Sorry.

Chair Mardfin: Replacing components of the bridges.

Ms. Murison: A point of clarification. We are not replacing any bridges except one, which is bridge no. 11 because it is structurally indeterminate, and Cody can give you more details if you want, but we are replacing individual components for various reasons.

Ms. Oana: Okay, another comment is to be open as well as for future design teams to be open to using new substances, such as like the FRP and cathodic protection. Another comment is maintenance is extremely important. Another comment is you might want to use weed-eaters or hand pull the weeds to avoid problems -- pesticides. Okay. To avoid pesticide, herbicide runoff into the stream.

Chair Mardfin: The thing is though that doesn't have anything to do with the preservation plan. That has to do with maintenance of bridges after they're built. So it's really not terribly relevant to a preservation plan but --

Ms. Aihara: But that does fall into helping the longevity of the bridge, so we do have it as part of Chapter 5, along with the FRP and other things --

Chair Mardfin: Oh. Okay.

Ms. Aihara: So it would be something that we add to the bridge maintenance.

Chair Mardfin: Okay. I retract my comment then.

Ms. Oana: Okay, another comment was to use asphalt instead of -- I mean, sorry, concrete instead of the asphalt to avoid the oils getting down into the stream, which makes it harmful for the streams. Another comment was about the no parking signs by, I think, I'm not sure what the bridge was, but bridge no. 19, people ignore the no parking signs and it makes --

Ms. Aihara: Actually, that was bridge 16, Waikani.

Ms. Oana: Oh, okay. It makes it into a one-lane road --

Chair Mardfin: But they also do it by Kapiliula, which is bridge 19.

Ms. Murison: The EMI Bridge, yeah.

Chair Mardfin: Yeah, that's a horrible name. Call it "Kapiliula." But there's also a lot of parking there and people often stack up there so --

Ms. Oana: Okay, future design team can consider I guess a turnout by that area, the bridge 16 area, I think, the no parking signs. And then consider different ways to save cost, such as doing all the same bridges at the same time or other economic considerations. Also consider changing the falling rock signs to other -- some other type of signage. And then also with the exception of the things that Mr. Mardfin conceded, if we could also submit these errors in preservation plan project he compiled.

Chair Mardfin: You don't need to do that. They've already submitted it to them. So that doesn't have to be part of this meeting. Ryan, do you have anything to add?

Mr. Ryan Quigless: The project team said that they dealt with local issues of how to get visitors to move to the side of the road; community outreach would be a priority; that there were 12 historic culverts spanning less than 20 feet; they're focusing on preserving the

visual integrity, the look of the final product would remain the same; the DOT in Oregon were specialists in experience in bridge preservation; and that the DOT states the project could span 50 years.

Chair Mardfin: At least 50 years, maybe a century. It look a long time to build. It wasn't opened until 1926 so --

Ms. Aihara: One thing I'd like to add is Oregon State, yes, they do have a lot of information on bridge preservation, but one thing that often dings us for this highway is that a lot of the design is for low-volume roads or for bridges that are within a national park or preservation area, so a lot of times it's like, oh, this is a really good way of how they preserve this, but then they turn around and go, well, you can't use it 'cause the document was specifically written for a low-volume road type of scenario, and Hana Highway --

Chair Mardfin: We're not exactly a low-volume road.

Ms. Aihara: We're actually a thousand over the average daily traffic for a low-volume road, so I did go through a lot of the Oregon State documents because that was brought up by a lot of other preservation communities and, unfortunately, a lot of it was, you know, this bridge is beautiful, it was in something something national park, or it was a low-volume road ...(inaudible)...

Chair Mardfin: What is a "low-volume road" by definition?

Ms. Aihara: Typically, the look at 400 cars or less has an average daily traffic.

Chair Mardfin: And we're at what?

Ms. Aihara: We're about 1400.

Chair Mardfin: Okay. Scott, you wanted to say something?

Mr. Crawford: A couple points, just I may have missed this, but in the notes was the sort of concurrence with the recommendation that as far as concrete surfaces, was that mentioned?

Chair Mardfin: It is now.

Mr. Crawford: So I wanted to just make sure that was in the notes because it was said at the time that was just one individual's recommendation but I'd like to make sure that that is coming from the Committee, especially for that one particular bridge, as Anjo noted, was it's a combination of so you don't have the continual build up of asphalt, you don't have the

environmental impact of the asphalt, but also you have more resistence to the water that's naturally on the road there that constantly is in need of repair so -- and then, also, on that same bridge, Waikani, the issue of parking there, this is again a little bit outside of the scope but something that can go into that additional chapter or recommendation is I have a, you know, I don't know this for sure, but I have a feeling that part of the reason why there's so many people parked there is because it's mentioned in the guidebooks as a feature that encourages people to stop and get out, and the fact that the police maybe are sometimes ticketing there is good, but if there's a way that the guidebooks could be encouraged to put that fact into the guidebooks but it is, you know, if they're telling people that there's a feature there and then encouraging people to park, they should also let them know that, basically, parking is not lawful and that they could be cited there and, you know, so because if the police are ticketing at one time, you know, the tourists coming the next day aren't going to be aware of that unless there's, you know, some way that that's made known that people can be ticketed there, so if there's a way that we can encourage the guidebooks to give out accurate information, I'd like to --

Chair Mardfin: We need a sign out there, one of the -- like they have by the police department occasionally, that says, "25 tickets given yesterday," "30 tickets given yesterday."

Mr. Crawford: That's a good idea too, yeah. 'Cause it really is a problem there for the local traffic, you know, sometimes you do -- just people -- it just becomes this big stuck traffic jam for emergency vehicles, obviously it's a huge problem, but just for us local traffic trying to get out there adding, you know, 10 or 15 minutes, you know, or even 5 minutes to your trip at every bridge where you have to wait and sit for the tourists to sort themselves out, you know. Anything that we can do to try to keep things flowing smoothly and not have everybody parking illegal is something I support.

Chair Mardfin: So we've had sort of a summary of what our major points have been. Anybody want to add anything that we think -- you think we've missed? John?

Mr. Blumer-Buell: The consultants brought up something I'd like to see included and that's just carrying capacity of that highway, it's not unlimited, and it's increased, and increased, and increased, and you know, what is the -- what really is the safe and reasonable carrying capacity of that highway. I mean people have talked for a long time about putting a toll road at Kamahina, for example, and that's partially to limit the traffic. I did read the section on the number of traffic accidents, that doesn't really seem to address the carrying capacity, but they're haven't been a lot of accidents, so just the carrying capacity.

Ms. Aihara: Yeah, so as part of this project, the engineering team had to go through the load-rating analysis of all the bridges, so the lowest is 10 tons, which is correctly posted right now between Milemarkers 2 and 3, and from the last time I was here, the sign has

grew like 5 times what it originally was, it was just this small little 10-ton sign, and now it's this kinda huge sign which I'm kinda glad that people know, but I do know from the communities, we've heard that they know people are going over that, not I mean well over. As with anything, there's always a safety factor, but 10 is what DOT is calling this highway portion and so, therefore, what we're trying to do is increase that to 40, and that's where this rehab is coming into effect is 40 tons to meet current code, which current code is 40.

Chair Mardfin: But until you fix -- until you get every bridge to 40, it's less than 40 for every bridge.

Ms. Aihara: Yes. That's exactly --

Chair Mardfin: 'Cause until you get the very last one does, it's gotta be a lower limit.

Ms. Aihara: Yes. Right. So what the DOT intends to do when this finally does complete, per the community's suggestions and, of course, what they would like to see is the 10 tons kept there on the sign, and, therefore, in turn, what will happen is any vehicle that needs to do onto Hana Highway, heavy loading, will need some kind of special issued permit so, in that case, the DOT will have records of these heavy-carrying vehicles and whether or not they could carry, now that's just for the public. On the emergency vehicles and all the State, Federal Highway Department, they will know or be notified when this is done that they're 40 tons and their vehicles can come in 'cause that was another issue with the criteria on this project was that not all the fire trucks and not all the EMS vehicles can drive into Hana Highway, there's a special type of trucks and vehicles that can only maneuver here, so part of our project was to take that into consideration. So in the upgrade to 40 tons, when we're finally done, EMS, everybody, will know 40 tons is fine, so that will be an in-house thing on the government side; public side, you will need a special use permit and that's the only way you can use a heavy-use vehicle over this, or else everything is 10 tons.

Chair Mardfin: Anjoleen.

Ms. Hoopai-Waikoloa: I would just like to put on record that I support the community's suggestion that after the weight limit capacity is upgraded that we still maintain a signage of 10 tons because I know our biggest concern is, you know, when everything is said and done, then what's next that will be coming into Hana, what big things will make its way out here, and that's just part of preserving our history and protecting our 'aina that we have out here.

Chair Mardfin: Thank you. Thank you. Does anybody want to weigh in on the issue of kahako and okina in the signage? I know some people think we should have them, and some people think we shouldn't.

Ms. Hoopai-Waikoloa: Personally, I would say no because kahako and okina are more modern language for the modern speaker. It's more for the written, then they know, okay, you know, it has a kahako so it means something else, but, historically, we didn't have kahako and we didn't okina. It was just how things were said and it's the history behind that place. So every bridge has a name specific to something in that area, so it's learning about that area you'll understand what the name is. Being able to say the name, you'll know if there's a okina or a kahako, so me, personally, I would not have kahako and okina, but modern-day people, hello, will probably say yes because it makes it easier to be like you can look it up, oh okay, it has the okina, it has a kahako over here, but that just became later written language then the oral.

Chair Mardfin: Any other comments from anybody? Are we ready to vote on the motion? John?

Mr. Blumer-Buell: Could you read the motion again to --

Chair Mardfin: The motion is to recommend that these comments that we've made, particularly as summarized by Jennifer and Ryan and Scott and me, and you, be made a part of the official record. That we're recommending that these things be considered by the team. I think that was the motion. It was to approve and recommend the comments as stated and discussed. Anymore discussion? John? The motion has been made. It has been moved and seconded. We've had discussion. We are ready for the vote if nobody has anymore discussion.

There being no further discussion, the motion was put to a vote.

It has been moved by Committee Member Hoopai-Waikoloa, seconded by Committee Member Galestone, then unanimously

VOTED: to approve and recommend the comments as stated and discussed.

Chair Mardfin: It passes -- well, four passes it. I don't have to vote. So it passed unanimously. Anything else, Charlene?

Ms. Shibuya: Actually, I think no. I think it wraps it up, but I think it was really nice that we had only us on the agenda 'cause we had quite a bunch of lively discussion and I think that's really important for a plan that's going to span 50 years.

Chair Mardfin: And I'd like to thank all of you people for coming here and sharing your mana'o. It seems to be a very good plan but, as I said, I don't necessarily approve of everything that's in there, just the stuff that I've read I've commented on.

Ms. Shibuya: Oh yeah, we fully understand that and that's why I think it's really important, you know, for the programmatic agreement and then the idea that the designers come back to the community each and every time.

Chair Mardfin: Yes.

Ms. Shibuya: 'Cause, you know, sentiments change through the generation.

Chair Mardfin: Right. And you got a concession out of me. I will change with evidence, but without evidence, I tend not to change, so you've convinced me on the two bridges.

Ms. Shibuya: But I like you 'cause you always go back to the facts.

Chair Mardfin: Yeah, I did, and I went back and I check two or three, four different sources before I conceded it.

Ms. Shibuya: Yeah, appreciate it.

Chair Mardfin: I have an 1885 map I check.

Ms. Shibuya: Without the diacritical marks, of course.

Chair Mardfin: No, I didn't have them on there. Okay, thank you very much.

Ms. Shibuya: Thank you.

Chair Mardfin: That ends the Communications portion of today's meeting. We are now up to D, the Director's Report, no. 1, scheduling of other Hana region applications. I think that's you, Clayton.

D. DIRECTOR'S REPORT

- 1. Scheduling of other Hana Region Applications
- 2. Discussion of Future Hana Advisory Committee Agendas

Mr. Yoshida: Thank you, Mr. Chair. I had Suzie poll the Committee Members regarding a November 2nd meeting on the Planning Director's proposal to revert the proposed Hana Golf Course entitlements back to the original ag. It looks like everybody can make it on

November 2nd, including Clayton, Dawn was somewhat questionable, but so as soon as we solidify on a place, then we can notify the members and send out our notice of public hearing.

Chair Mardfin: Thank you. And so that was what date? I know you emailed me but --

Mr. Yoshida: We're looking at Monday, November 2nd.

Chair Mardfin: Secondly, discussion of future Hana Advisory Committee agendas.

Mr. Yoshida: After that, we still have the Gary Stice special management area use permit for the construction of two dwellings in the Koki Beach area to consider and, right now, it's not ready to be scheduled but we'll keep the Committee informed.

Chair Mardfin: Is he -- I don't know whether this is appropriate or not, and, Jennifer, if I have to shut up, tell me to shut up, he owns a piece of property down there with -- that he uses, I believe, for short-term rental or B&B, is that continuing use or you don't know? It's about a hundred yards from the piece of property.

Ms. Hoopai-Waikoloa: Can I answer that? Right now, that's actually -- I don't know if permitted-wise, but it's actually in a long-term rental. The person who's in there right now --

Chair Mardfin: Long-term rental?

Ms. Hoopai-Waikoloa: Is renting it long-term.

Chair Mardfin: Thank you. That's all I needed to hear.

Ms. Hoopai-Waikoloa: I don't know. I think, the last I know, I think Uncle right now is at two years.

Chair Mardfin: Okay.

Ms. Hoopai-Waikoloa: Instead of the --

Chair Mardfin: Six months makes it long term. That takes care of my issue. Thank you very much.

Ms. Hoopai-Waikoloa: I don't know about the permitting side but --

Chair Mardfin: You don't need special permits to do long-term leases. You only need it for short-term rental and B&B. Mr. Blumer-Buell?

Mr. Blumer-Buell: Just for the record, for Hana Advisory Committee Member, Ed Cashman, filed complaints on the -- that rental several times so I would just request that we get the official status from the county when it comes up. I mean there's -- so that's all.

Chair Mardfin: Thank you very much. Is there anything else anybody would like to say? Mr. Blumer-Buell?

Mr. Blumer-Buell: Yeah, I would just like to thank the Planning Department for scheduling the hearing out here on the former county club and golf course, and also the Stice request, and just restate that I think it's really constructive to have every SMA permit applied for in the Hana District come before this group, if possible. Thank you.

E. ADJOURNMENT

Chair Mardfin: If there's nothing else, I have 6:31, and I declare the meeting adjourned. Do I need a motion?

Mr. Crawford: I so move.

Chair Mardfin: Second?

Ms. Hoopai-Waikoloa: I'll second.

It has been moved by Committee Member Crawford, seconded by Committee Member Hoopai-Waikoloa, then unanimously

VOTED: to adjourn the meeting at 6:31 p.m.

Respectfully submitted by,

SUZETTE L. ESMERALDA Secretary to Boards & Commissions

RECORD OF ATTENDANCE

Present

Ward Mardfin, Chairperson Gale Notestone, Vice-Chairperson John Blumer-Buell Scott Crawford Anjolee Hoopai-Waikoloa

Excused

Clayton Carvalho, Jr. Dawn Lono

Others

Clayton Yoshida, Planning Program Administrator Ryan Quigless, Staff Planner Jennifer Oana, Deputy Corporation Counsel